

1-decene tetramer mixed with 1-decene trimer - Comments of Environmental Defense

(Submitted via Internet 6/14/02)

Environmental Defense appreciates this opportunity to submit comments on the robust summary/test plan for 1-decene tetramer mixed with 1-decene trimer, hydrogenated.

The test plan for 1-decene tetramer mixed with 1-decene trimer (D4D3H) was prepared by the higher olefins panel of the American Chemistry Council. These are highly branched isoparaffinic chemicals produced by oligomerization of 1-octene, 1-decene and/or 1-dodecene. No information was presented on the use of D4D3H so we cannot evaluate the potential for consumer or workplace exposures. While this kind of information is not explicitly required under the HPV program, we find it important from a public health perspective.

The sponsor proposes additional studies on physiochemical properties and environmental fate. Such studies are appropriate based on the potential for these long-chained and branched substances to persist in the environment. The biodegradation studies that were presented in the robust summaries did not identify the breakdown products. We are concerned that the breakdown products themselves might not be readily degraded further and could therefore accumulate in the environment. Accordingly, we recommend that EPA and the American Chemistry Council evaluate the breakdown products of D4D3H.

The sponsor proposes to use existing health effects data for structural analogs of D4D3H to fulfill HPV requirements. We have carefully reviewed these data and we concur with the sponsor's recommendation that no additional health effects studies are needed. The health effects data on similar mixtures or homopolymers containing tetramer or trimer did not raise concerns so we are satisfied that additional health effects studies are not needed for HPV purposes.

Thank you for this opportunity to comment.

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